

On September 21, 1995, the '490 application was amended replacing the generic gas claim with SF₆ (claim 27). A few days later on September 25, 1995 a preliminary amendment was filed in the '413 application replacing generic gas claim with fluorinated hydrocarbon gas (claim 20 and others).

An obviousness-type double patenting rejection of hydrocarbon claim 20 in the '413 application over SF₆ claim 27 of the '490 application was made in an Official Action dated February 12, 1996, copy attached, and was overcome by the filing of a terminal disclaimer on April 17, 1996, copy attached. Thereafter the '490 (SF₆) and '413 (fluorinated hydrocarbon) patents issued.

Clearly a single inventive concept was presented in the original disclosure leading to the issuance of the '490 and '413 patents. That these two patents claim obvious variants of the same invention is evidenced by the obviousness-type double patenting rejection of the '413 patent over the '490 patent, and by the subsequent terminal disclaimer. Accordingly, the present applicants are seeking a single interference involving both patents.

Claims 57 and 72 submitted with the Amendment of October 16, 1997 copied from the '413 patent, are amended above for purposes of clarity emphasizing the biocompatible halogenated gas contained in the microbubbles which includes both halogenated hydrocarbons and SF₆. To this end, proposed claim 57 has been slightly adjusted; also the possibility of the gas contained in the microbubbles as being air has been removed. A similar change has been made to claim 72. Accordingly, claims 57-79 may be considered for the proposed interference. These claims find basis in the disclosures of the identified patents and subject application as explained in the remarks portions of the amendments filed July 15 and October 16, 1997.

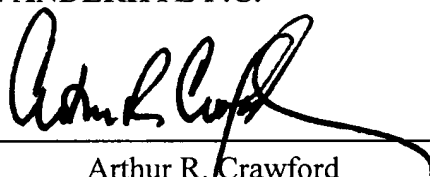
Claims such as claim 59 specifying that the freon is a perfluorinated hydrocarbon find basis in the original disclosure of freon which includes hydrocarbons in which all of the hydrogen atoms are replaced with fluorine, for example, freon-14 or CF_4 as well as freon-C318 (C_3F_8). Applicants disclose "physiologically acceptable gases" including freon at page 5, first full paragraph of the specification. In view of applicants' disclosure one skilled in this art would appreciate that selected fluorinated hydrocarbons would be suitable freons for this purpose in terms of physiological acceptability; see the attached declaration of Dr. M. Schneider, the senior inventor and applicant, with respect to the present application. In particular, one skilled in the art would look to the fluorine containing freons because they are biocompatible.

Please proceed to establish the interference as applicants have requested and as discussed during the interview of April 27, 1998.

Respectfully submitted,

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